



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,681	07/13/2001	Kenneth John Davey	90017	4801

7590

03/20/2003

Allen, Dyer, Doppelt, Milbrath & Gilchrist, P.A.  
Suite 1401  
255 South Orange Avenue  
P.O. Box 3791  
Orlando, FL 32802-3791

EXAMINER

CYGAN, MICHAEL T

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 03/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/905,681

Applicant(s)

DAVEY, KENNETH JOHN

Examiner

Michael Cygan

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7, 10, 20-24 and 29-38 is/are pending in the application.
- 4a) Of the above claim(s) 30-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10, 20-24 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 7, 11
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 30-38 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 10.
2. Applicant's election with traverse of the first species in Paper No. 10 is acknowledged. The traversal is on the ground(s) that species 3 is a subset of species 1. This is not found persuasive because monitoring for leaks by using a marker is different than monitoring for a change in fluid flow rate. No claims which are directed to both species (types of monitoring) are currently present in the application. Newly submitted claims 30-38 are directed to the species comprising a method for forming cavities in a structure, which is therefore directed to a nonelected species. The requirement is still deemed proper and is therefore made FINAL.
3. This application contains claims 30-38 which are drawn to an invention nonelected with traverse in Paper No. 10. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 7, 10, 20-23, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Haupt (US 4,344,320). Haupt discloses the claimed invention, including an apparatus having a pressurized helium gas source, structure having internal cavities [4<sub>n</sub>], communication channel connecting source and cavities, and a differential pressure gauge [15] surrounding a flow impedance [14] for monitoring changes in the steady state rate of inflow of helium into the cavities, where the pressure is disclosed to be such that the cavities are pressurized (forces such as hygroscopic and capillary are thus inherently overcome) but not so as to result in destruction of the cavities. A method is also disclosed where the abovedescribed apparatus is provided and the steady state rate of inflow of helium into the cavities is monitored. See entire document, especially columns 3-6 and Figures 3 and 7.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haupt (US 4,344,320) in view of Schulte (US 5,390,533). Haupt discloses the claimed invention except for the provision of a moisture trap between helium source and cavities. Schulte teaches the provision of a moisture trap [50] between a helium source [e.g., 42] and cavities in a system [10] and method for pressurizing a vessel for integrity testing with gas comprising reused and dried helium (see abstract and column 4, lines 14-48). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a moisture trap between helium source and cavities as taught by Schulte in the invention taught by Haupt to dry the entering helium gas, since this would remove water from the gas which could interfere with flow rate or mass spectrometric (Haupt analyzer [10]) measurements.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pressure testing of cavities by monitoring at least flow rate is disclosed by Soncrant (US 4,350,038), Askwith (US 4,364,261), Brayman (US 4,532,795), McGreehan (US 4,715,213), Gates (US 4,862,731), Cofield (US 4,942,758), Kuhns (US 5,056,356),

Mastandrea (US 5,295,391), Boone (US 5,412,978), and Keating (US 5,438,862).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cygan whose telephone number is 703-305-0846. The examiner can normally be reached on 8:30-6 M-Th, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on 703-305-4705. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Michael Cygan  
March 12, 2003

Robus  
RAEWIS  
AJ2851